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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,838	04/02/2004	Osamu Kitazawa	065905-0318	9686

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EXAMINER

JOERGER, KAITLIN S

ART UNIT PAPER NUMBER

3653

DATE MAILED: 11/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/815,838

Applicant(s)

KITAZAWA, OSAMU

Examiner

Kaitlin S. Joerger

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-4,6-10 and 12-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10 is/are allowed.
- 6) ☒ Claim(s) 2-4,6-9 and 12-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4/2/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-4, 6-9, and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amano in view of JP 04066466 A.

Regarding independent claim 3, Amano teaches a paper supply device, comprising:

- a paper supply roller, 8, that rotates in the sheets of paper supplying direction;
- a separation roller, 49, that holds the sheets of paper with the paper supply roller and maintains a driving force in the direction reverse to the paper supplying direction; and
- a shaft, 21, coupled to the paper supply roller and a driving mechanism connected to the shaft to rotate the paper supply roller, wherein the shaft is provided to oscillate around its one end portion while its other end portion is set to be free, and the paper supply roller contacts with the separation roller to supply the paper, see figures 1 and 5 and column 2, lines 40+.

Regarding claims 2 and 3, Amano teaches all of the features of the claimed invention except for a weight to press fit the paper supply roller to the separation roller by applying a load to the paper supply roller. The JP '466 patent teaches a weight, 4, that is mounted on the shaft of a roller. It would have been obvious to one of ordinary skill in the art at the time the invention

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was made to combine the weight taught by the JP '466 patent with the supply device of Amano in order to improve stability and reliability of the paper supply device by ensuring that the supply roller and separation roller remain in contact with each other.

Regarding claim 4, Amano further teaches a torque limiter, 25, through which the separation roller rotates.

Regarding independent claim 7, Amano teaches a paper supply device comprising:

- a paper supply roller, 8, that rotates in the sheets of paper supplying direction;
- a separation roller, 49, that holds the sheets of paper with the paper supply roller and maintains a driving force in the direction reverse to the paper supplying direction;
- an elastic member, 17, that press fits the paper supply roller to the separation roller by applying a compression force to either the paper supply roller or the separation roller; and
- a shaft, 21, coupled to the paper supply roller and a driving mechanism connected to the shaft to rotate the paper supply roller, wherein the shaft is provided to oscillate around its one end portion while its other end portion is set to be free, and the paper supply roller contacts with the separation roller to supply the paper, see figures 1 and 5 and column 2, lines 40+.

Regarding claims 6, 7 and 8, Amano teaches all of the features of the claimed invention, including that the elastic member presses the paper supply roller to the separation roller side, except for a weight to press fit the paper supply roller to the separation roller by applying a load to the paper supply roller. The JP '466 patent teaches a weight, 4, that is mounted on the shaft of a roller. It would have been obvious to one of ordinary skill in the art at the time the invention

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was made to combine the weight taught by the JP '466 patent with the supply device of Amasno in order to improve stability and reliability of the paper supply device by ensuring that the supply roller and separation roller remain in contact with each other.

Regarding claim 9, Amano further teaches a torque limiter, 25, through which the separation roller rotates.

Regarding claim 13, Amano teaches an image forming apparatus comprising:

- an image carrier;
- an image forming unit;
- a transfer unit (see figure 6 and column 3, lines 32+);
- a paper supply roller, 8, that rotates in the sheets of paper supplying direction;
- a separation roller, 49, that holds the sheets of paper with the paper supply roller and maintains a driving force in the direction reverse to the paper supplying direction; and
- a shaft, 21, coupled to the paper supply roller and a driving mechanism connected to the shaft to rotate the paper supply roller, wherein the shaft is provided to oscillate around its one end portion while its other end portion is set to be free, and the paper supply roller contacts with the separation roller to supply the paper, see figures 1 and 5 and column 2, lines 40+.

Regarding claims 12 and 13, Amano teaches all of the features of the claimed invention except for a weight to press fit the paper supply roller to the separation roller by applying a load to the paper supply roller. The JP '466 patent teaches a weight, 4, that is mounted on the shaft of a roller. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the weight taught by the JP '466 patent with the supply device of Amasno

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in order to improve stability and reliability of the paper supply device by ensuring that the supply roller and separation roller remain in contact with each other.

Regarding claim 14, Amano further teaches a torque limiter, 25, through which the separation roller rotates.

Allowable Subject Matter

Claim 10 is allowed.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

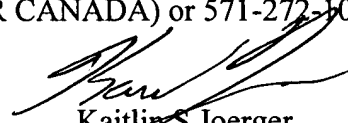
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kaitlin S. Joerger whose telephone number is 571-272-6938. The examiner can normally be reached on Monday - Friday 9-5.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on 571-272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Kaitlin S Joerger
Examiner
Art Unit 3653

7 November 2006


PATRICK MACKEY
SUPERVISORY PATENT EXAMINER
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